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Application No.: 10/671,277

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 – 9 (Cancelled)

10. (Currently Amended) ~~The method according to claim 9 further comprising a step of~~ A method for synchronizing clocks of a station and an access point in a wireless local area network, comprising steps of:

asserting a request signal from a station to an access point;

asserting a responsive signal packet containing a time stamp in response to said request signal from said access point to said station;

tagging a local time value to said responsive signal packet at said station;

operating said time stamp and said local time value at said station according to a control program to obtain a difference T; and

determining switching timing between a working and a sleeping modes of said station after said clocks of said station and said access point are synchronized, ~~said step comprising~~ which comprises sub-steps of:

obtaining next target beacon transmission time by operating a beacon interval and said ~~new counting value adjusted with said difference T~~ adjusted local time value; and

determining said switching timing between said working and said sleeping modes of said station according to said ~~new counting~~ local time value, said difference T and said next target beacon transmission time.

Claims 11 – 18 (Cancelled).

19. (Currently Amended) ~~The wireless local area network media access controller according to claim 17 further comprising~~ A wireless local area network media access controller, disposed in a first node of a wireless local area network, comprising:

a local time tagger tagging a local time value to a responsive signal packet received from a second node of said wireless local area network in response to a request signal asserted by said first node to said second node; and

a difference register storing therein a difference T between said local time value and a time stamp, said difference T being referred to adjust at least one of clocks of said first and said second nodes to synchronize said clocks of said first and said second nodes;

a register for storing a next target beacon transmission time, said a next target beacon transmission time being obtained by operating a beacon interval and said ~~new counting~~ local time value adjusted with said difference T, and referred to determine switching timing between a working and a sleeping modes of said ~~station~~ first node along with said ~~new counting~~ local time value and said difference T.

20. (Currently Amended) The wireless local area network media access controller according to claim [[12]] 19 wherein said first and said second nodes are a first and a second station, respectively.

21. (NEW) The wireless local area network media access controller according to claim 19 wherein said first and second nodes are a station and an access point, respectively.

22. (NEW) The wireless local area network media access controller according to claim 21 wherein said clock of said station is adjusted to synchronize with said clock of said access point according to said difference T.

23. (NEW) The wireless local area network media access controller according to claim 22 wherein said request signal is a probe-request signal asserted

by said station, and wherein said responsive signal packet is a probe-response signal packet asserted by said access point.

24. (NEW) The wireless local area network media access controller according to claim 23 wherein said time stamp is a counting value C1 of a remote counter in said access point, which is generated when said responsive signal packet is asserted by said access point.

25. (NEW) The wireless local area network media access controller according to claim 24 wherein said local time value is a counting value C2 of a local counter in said station, which is generated when said responsive signal packet is received by said station.

26. (NEW) The wireless local area network media access controller according to claim 25 wherein said clock of said station is adjusted by adding said difference T to a new counting value of said local counter.

27. (NEW) The method according to claim 10 wherein said request signal is a probe-request signal asserted by said station.

28. (NEW) The method according to claim 10 wherein said responsive signal packet is a probe-response signal packet asserted by said access point.

29. (NEW) The method according to claim 10 wherein said time stamp is a counting value C1 of a remote counter in said access point, which is generated when said responsive signal packet is asserted by said access point.

30. (NEW) The method according to claim 29 wherein said local time value is a counting value C2 of a local counter in said station, which is generated when said responsive signal packet is received by said station.

31. (NEW) The method according to claim 30 wherein said difference T is equal to $C1 - C2$, and stored in a difference register in said station.

32. (NEW) The method according to claim 31 wherein said clock of said station is synchronized with said clock of said access point by adding said difference T to a new counting value of said local counter.